

Program Structure

Week	Modules & Topics	Delivery Mode
HTML , CSS and JavaScript		
1	Basic Structure of an HTML Page	Online Video Content
	Various Tags and Attributes	
	Inline and Block Elements	
	Forms	
	Intro to CSS	
	CSS Properties and their syntaxes	
	Various Selectors in CSS and their preference orders	
	Inline , Internal and External Styling	
	Box Model	
	Programming Constructs	
	Primitives & Datatypes Variables	
	Built-in methods logical and and or operators	
	Boolean logic	
	Logical operators	
	Conditionals Loops - While & For	
	Data Types in JavaScript	
	Functions	
	IIFEs	
	Arrays(Including Array Methods ans Array Iteration)	
	Objects -Literals,Difference between Arrays & Objects -Nested Arrays & Objects -JSON -Method augmentation	
	Scoping	
	Hoisting(Variable and Function)	
	Closures	
	Constructors	
	Asynchronous JavaScript	
	Performing Ajax calls – GET and POST (XMLHttpRequest object, its properties, methods and events)	

	ES6 Concepts(let and const, differences with var Template strings Default arguments for functions Arrow functions – syntax and semantics (context of arrow function calls) Array and object destructuring Rest operator – within arguments list, when destructuring arrays and objects Spread operator – when passing arguments as array items, creating copies of objects and arrays Classes and inheritance Iterables, for..of Map, Set Iterators and Generators Promises Fetch API for Ajax calls async..await	
	Mentored Learning Session	Live
	Assessments	
	Practice Quiz and Labs	
	Angular	
2-3	Webpack and Babel	Online Video Content
	Introduction to Angular	
	Angular Router and Single Page Applications	
	Angular Forms	
	Flow Architecture	
	Redux	
	Client Server Communication	
	Mentored Learning Session	Live
	Assessments	
	Practice Quiz and Labs	
	Mini-Hackathon	
	Foundations of Java Programming	
4	Java Introduction	Online Video Content
	Data Types & Programming constructs	
	Classes, Objects & Methods	
	OOPS Properties - Abstraction, Encapsulation, Polymorphism, Inheritance	
	Constructors	
	Mentored Learning Session	Live

	Practice Quiz and Labs	
	Data Structure in Using Java	
	Generics Annotations Exception Handling Collections Framework File IO Concurrency Streams API, Date & Time API	
	Mentored Learning Session	Live
	Practice Quiz and Labs	
	Database with Java	
6	SQL DDL, DML and DQL Normalization Joins SubQuery Query optimization using Indexes JDBC Introduction to ORM using Hibernate Working with Hibernate using SQL and No SQL	
	Mentored Learning Session	Live
	Assessments	Online
	Practice Quiz and Labs	
	Mini-Hackathon	
	Web Dev Frameworks -I	
7	Working with Maven Understanding and Creating web services using Traditional Approach Spring Fundamentals and Spring Core Spring DI Spring AOP	
	Mentored Learning Session	Live
	Practice Quiz and Labs	
	Web Dev Frameworks -I	
8	Introduction to SpringBoot	
	Spring Boot MVC	
	Spring Boot JPA using Mongoddb	
	Mentored Learning Session	Live

	Practice Quiz and Labs	
	Web Dev Frameworks -II	
9	Spring Security	Online Video Content
	Spring Cloud	
	Swagger Document	
	Introduction to Microservice	
	Working with Eureka Server	
	Mentored Learning Session	Live
	Practice Quiz and Labs	
	Web Dev Frameworks -III	
10	Working with Git	
	CI CD using Git	
	Working with Docker	
	Mentored Learning Session	Live
	assessments	Online
	Practice Quiz and Labs	
	Mini-Hackathon	
	Capstone Project	
11-12	This can be a group project, where a team works on an application(Agile way) from scratch and submit by the end of the last week	Online